

REMARKS

Claims 1-15 are all the claims pending in the application.

I. Rejections Under 35 U.S.C. § 112, first paragraph

The Examiner has rejected claims 1, 3, 5, 7, 10, 11 and 13 under 35 U.S.C. § 112, first paragraph. Applicants have amended these claims in a manner to overcome this rejection. In particular, Applicants note that the term "immediately" in the claims has been replaced with the term -automatically-. Accordingly, Applicants respectfully request that the rejection be reconsidered and withdrawn.

II. Claim Rejections Under 35 U.S.C. § 102(b)

The Examiner has rejected claims 1-3, 5 and 7-11 under 35 U.S.C. § 102(b) as being anticipated by Kulha et al. (U.S. 5,9073,611).

Claim 1, as amended, recites the feature of a locking controller operable to automatically make an unlocked locking mechanism or mechanisms be in the locked state, when one of the one or more doors is opened after the one or more doors are unlocked by the unlocking controller with a capture of an emergency signal, and then the closing of the opened door is detected. Applicant submits that Kulha fails to disclose or suggest at least this feature of claim 1.

Kulha discloses a hands-free remote entry system for vehicles. The remote entry system includes a base transceiver 12 located at the vehicle and a hand held transceiver 14 carried by a user of the system (see col. 3, lines 3-7). Wake-up sensors 20 are provided in the base

transceiver 12 and are able to detect approaching objects within various zones 52 around the vehicle (see col. 3, lines 20-22). The zones 52 are generally circular zones having diameters of about one to two feet (see col. 4, lines 18-19). An interior sensor 32 is also provided that detects whether a user is inside a zone 54 within the vehicle (see col. 4, lines 19-21).

Upon sensing an object within one of the zones, the base transceiver 12 transmits wake-up information to the hand held transceiver 14 carried by the user (see col. 3, lines 24-27). Upon receipt of the wake-up information, the hand held transceiver transmits identification and data signals back to the base transceiver (see col. 3, line 65 - col. 4, line 1).

In order to unlock a door to the vehicle as a user approaches the vehicle, the hands-free remote entry system operates as follows. When the user approaches the vehicle, one of the wake-up sensors 20 will detect the user within one of the zones 52 (see Fig. 2 and col. 5, lines 1-4). Upon detecting the user, the base transceiver 12 transmits wake-up and data signals from each zone 58 (see Fig. 2 and col. 5, lines 4-8).

If the hand held transceiver 12 is within one of the zones 58, the hand held transceiver 12 will receive the wake-up and data signals and will enter a fully operational state (see col. 5, lines 8-11). Upon entering the fully operational state, the hand held transceiver transmits identification and data signals that are received by the base transceiver 12 (see col. 5, lines 11-14). A microprocessor within the base transceiver will then unlock the driver side door 51 (see col. 5, lines 14-16).

In a similar manner, when a user of the system leaves the vehicle, the system operates to lock the doors automatically. To initiate a locking route, the system first checks to ensure that (1) the ignition is off, (2) the driver's door is closed, and (3) that there are no users within the zone 54 inside the vehicle (see col. 5, lines 17-21). Upon verifying these conditions, the base transceiver 12 transmits a door lock signal to the hand held transceiver (see col. 5, lines 21-24).

If the hand held transceiver 14 receives the lock signal with the correct identification data, the hand held transceiver 14 sends a door lock message which will be received by the base transceiver 12 (see col. 24-29). The microprocessor within base transceiver 12 will then lock the doors to the vehicle and transmit a "secured vehicle" message to the hand held transceiver (see col. 29-35).

Thus, while Kulha discloses the ability to automatically unlock a door when a user approaches the vehicle, and automatically lock a door when a user leaves the vehicle, Kulha does not disclose or suggest a locking controller operable to automatically make an unlocked locking mechanism be in the locked state, when one of the doors is opened after being unlocked by the unlocking controller with a capture of an emergency signal, and then the closing of the opened door is detected.

By unlocking a door upon the reception of an emergency signal, and then automatically locking the door after the unlocked door is opened and then closed, the invention recited in claim 1 provides a user with the ability to have a door automatically lock after entering through the door and then closing the door, thus increasing the safety for the user in an emergency situation.

In view of the foregoing, Applicant respectfully submits that claim 1 is patentable over Kulha, an indication of which is respectfully requested.

Claim 2, as amended, recites the feature of an opening detector operable to detect the opening of one of at least two or more doors, and a first locking controller operable to make locking mechanisms to closed doors be in a locked state, when the opening of the one of the one or more doors is detected by the opening detector with a capture of the emergency signal.

Applicant submits that Kulha fails to disclose or suggest at least this feature of claim 2.

As discussed above, Kulha discloses a locking procedure that operates when a user exits a vehicle. In particular, upon detecting that the ignition is off, that the user is not in the vehicle, and that the door has closed, the locking procedure begins. Thus, in Kulha, the door is closed when the locking procedure takes place.

On page 5 of the Office Action, the Examiner asserts that claim 2 does not recite that the closed doors are locked upon the opening of one door. Applicant respectfully disagrees. As noted above, claim 2 recites the feature of a first locking controller operable to make locking mechanisms to closed doors be in the locked state when the opening of the one door is detected.

In view of the foregoing, Applicant submits that claim 2 clearly recites that closed doors are locked upon the opening of one door, and further, submits that Kulha fails to disclose or suggest such a feature. If the Examiner maintains the rejection, Applicant kindly requests that the Examiner particularly explain how the language in claim 2 is being interpreted.

Further, as discussed above with respect to claim 1, Applicant respectfully submits that the locking controller of Kulha does not operate upon doors that are unlocked by a locking controller with a capture of an emergency signal.

In view of the foregoing, Applicant submits that claim 2 is patentable over Kulha, an indication of which is respectfully requested.

Regarding claim 3, Applicant notes that this claim depends from claim 2 and is therefore considered patentable at least by virtue of its dependency. Further, claim 3 recites the feature of a closing detector operable to detect the closing of the one door, and a second locking controller operable to automatically lock the one door when the one door is opened and then the closing of the one door is detected.

Applicant respectfully submits that Kulha fails to disclose or suggest such a feature. As discussed above, Kulha merely discloses a locking procedure that is initiated when a user removes the key from the ignition, exits the vehicle, and closes the door. According to claims 2 and 3, however, after an emergency signal is received, at least two doors are unlocked, wherein an opening of one of the doors causes the remaining closed doors to be locked, and then the closing of the opened door causes that door to be locked.

In view of the foregoing, Applicant submits that claim 3 is patentable over Kulha, an indication of which is respectfully requested.

Claim 5, as amended, recites the feature of a locking controller operable to automatically make a locking mechanism to a prescribed door be in the locked state, when the prescribed door

is opened after being unlocked by the unlocking controller with a capture of the emergency signal, and then the closing of the opened prescribed door is detected by the closing detector.

For similar reasons as discussed above with respect to claim 1, Applicant submits that Kulha fails to disclose or suggest such a feature. Accordingly, Applicant submits that claim 5 is patentable over Kulha, an indication of which is respectfully requested.

Claim 7, as amended, recites the features of a first closing detector operable to detect the closing of a first one of the at least two or doors, and a first locking controller operable to automatically make the locking mechanism to the first one of the doors, the closing of which is detected, be in the locked state when the first one of the doors is opened after the at least two more doors are unlocked by the unlocking controller with a capture of the emergency signal, and then the closing of the opened door is detected by the first closing detector.

For similar reasons as discussed above with respect to claim 1, Applicant submits that Kulha fails to disclose or suggest such features. Accordingly, Applicant submits that claim 7 is patentable over Kulha, an indication of which is respectfully requested.

Claim 9 depends from claim 7 and is therefore considered patentable at least by virtue of its dependency. In addition, claim 9, as amended, recites the feature of a second closing detector operable to detect the closing of a prescribed one of the at least two or more doors, and a second locking controller operable to automatically make the locking mechanisms to the closed doors be in the locked state, when the prescribed one of the at least two or more doors is opened after the at least two or more doors are unlocked by the unlocking controller with a capture of the

emergency signal, and then the closing of the opened prescribed door is detected by the second closing detector.

Thus, according to claims 7 and 9, when the opening and then closing is detected of a first one of the doors, the first door is locked by the first locking controller, and when the opening and then closing is detected of a prescribed one of the doors, the doors which are closed are locked by the second locking controller. Applicant respectfully submits that Kulha fails to disclose or suggest such features.

In particular, as discussed above, Kulha merely discloses a locking procedure that is initiated when a user removes the key from the ignition, exits the vehicle, and closes the door. Accordingly, Applicant submits that claim 9 is patentable over Kulha, an indication of which is respectfully requested.

Claim 8, as amended, recites the features of an opening detector operable to detect the opening of a first one of the at least two or more doors, and a first locking controller operable to automatically make the locking mechanism to the first one of the doors, the opening of which is detected, be in the locked state when the opening of the first one of the doors is detected by the opening detector after the at least two or more doors are unlocked by the unlocking controller with a capture of the emergency signal.

Applicant respectfully submits that Kulha fails to disclose or suggest such features. In particular, Applicant submits that Kulha fails disclose or suggest that a door is made to be in the

locked state when an opening of the door is detected. Accordingly, Applicant submits that claim 8 is patentable over Kulha, an indication of which is respectfully requested.

Claim 10 depends from claim 8 and is therefore considered patentable at least by virtue of its dependency. In addition, claim 10, as amended, recites the feature of a closing detector operable to detect the closing of a prescribed one of the at least two or more doors, and a second locking controller operable to automatically make the locking mechanisms to the closed doors be in the locked state, when the prescribed one of the at least two or more doors is opened after the at least two or more doors are unlocked by the unlocking controller with a capture of the emergency signal, and then the closing of the opened prescribed door is detected by the closing detector.

Thus, according to claims 8 and 10, when the opening is detected of a first one of the doors, the first door is locked by the first locking controller, and when the opening and then closing is detected of a prescribed one of the doors, the doors which are closed are locked by the second locking controller. Applicant respectfully submits that Kulha fails to disclose or suggest such features.

In particular, as discussed above, Kulha merely discloses a locking procedure that is initiated when a user removes the key from the ignition, exits the vehicle, and closes the door. Accordingly, Applicant submits that claim 10 is patentable over Kulha, an indication of which is respectfully requested.

Claim 11, as amended, recites the feature of a locking controller operable to automatically make an unlocked locking mechanism or unlocked locking mechanisms be in the locked state, when the closing of the one of the one or more doors is detected by the closing detector after capturing mechanism captures the emergency signal. Applicant respectfully submits that Kulha fails to disclose or suggest at least this feature of claim 11.

As discussed above, in Kulha, when a door is automatically unlocked upon a user approaching the car, the user opens the door, enters the vehicle, and then closes the door. Conversely, when a user turns off the ignition, exits the car, and closes the door, a locking procedure is initiated which involves sending a signal from the base transceiver 12 to the hand held transceiver 14, wherein the hand held transceiver 14 returns a signal to the base transceiver 12 instructing that the door should be locked.

Thus, Applicant respectfully submits that Kulha fails to disclose or suggest a locking controller which operates when the closing of one of the doors is detected after an emergency signal is captured. In contrast, Kulha merely discloses a door that is locked after certain conditions are verified (i.e., ignition is off, user has exited the vehicle, and the door has been closed).

Accordingly, Applicant submits that claim 11 is patentable over the cited prior art, an indication of which is respectfully requested.

III. Claim Rejections Under 35 U.S.C. § 103(a)

A. The Examiner has rejected claims 4 and 6 under 35 U.S.C. § 103(a) as being unpatentable over Kulha et al. in view of Shibata et al. (U.S. 4,897,643).

Claim 4, as amended, recites the features of an opening detector operable to detect the opening of one of the one or more doors, and a locking controller operable to make an unlocked mechanism or mechanisms be in the locked state, when the opening of the one of the one or more doors is detected by the opening detector after the one or more doors are unlocked by the unlocking controller with a capture of the emergency signal.

The Examiner recognizes that Kulha does not disclose or suggest these features recited in claim 4. In an attempt to cure this deficiency, the Examiner applies Shibata and alleges that Shibata discloses such features. Applicant respectfully disagrees.

Shibata discloses a CPU 302 which is able to detect various locking conditions. For example, the CPU 302 is able to detect when a door lock switch (Fig. 10, elements 211a-214a) has been pushed when a door is in an open position (col. 7, lines 66-68). The CPU 302 can also detect when all four doors are locked while the doors are in an open position (see col. 8, lines 2-4).

Thus, Shibata provides the ability to detect when doors are in a locked state when in an open position. Shibata, however, provides absolutely no disclosure regarding a locking controller which is operable to make an unlocked locking mechanism be in the locked state when an opening of a door is detected. Indeed, Shibata does not even remotely suggest such a feature.

That is, while Shibata discloses the ability to detect if a door in an open position is in a locked state, Shibata does not provide a locking controller which locks a door when the opening of the door is detected. Accordingly, Applicant submits that claim 4 is patentable over the cited prior art, an indication of which is respectfully requested.

Further, similar to the discussion above regarding claims 1 and 2, Applicant submits that the locking controller of Kulha does not operate upon doors that are unlocked by a locking controller with a capture of an emergency signal.

Regarding claim 6, Applicant notes that this claim recites the features of an opening detector operable to detect the opening of a prescribed door, and a locking controller operable to make the locking mechanism to the prescribed door be in the locked state, when the opening of the prescribed door is detected by the opening detector after the prescribed door is unlocked by the unlocking controller with a capture of the emergency signal.

For similar reasons as discussed above with respect to claim 4, Applicant submits that the combination of Kulha and Shibata fails to disclose or suggest such features. Accordingly, Applicants submit that claim 6 is patentable over the cited prior art, an indication of which is respectfully requested.

B. The Examiner has rejected claims 12-15 under 35 U.S.C. § 103(a) as being unpatentable over Kulha et al. in view of Drori (U.S. 5,973,611).

Claim 12 depends from claim 1. The Examiner asserts that Drori teaches a first actuation control means to actuate prescribed functions when a prescribed remote control signal or emergency signal is received. Applicant respectfully submits, however, that Drori fails to cure the deficiencies of Kulha with respect to claim 1, as discussed above. Accordingly, Applicant submits that claim 12 is patentable at least by virtue of its dependency.

Claim 13, as amended, recites the feature of an actuation controller operable to actuate prescribed functions, when one of the one or more doors is opened after the doors are unlocked by the unlocking controller with a capture of the emergency signal, and then the closing of the opened door is detected by the closing detector.

As discussed above, in Kulha, when a door is automatically unlocked upon a user approaching the car, the user opens the door, enters the vehicle, and then closes the door. Conversely, when a user turns off the ignition, exits the car, and closes the door, a locking procedure is initiated for locking the door.

Thus, while Kulha discloses the ability to unlock a door via a hands-free remote when a user approaches a vehicle, upon the opening of the unlocked door and then the closing of the opened door, the hands-free remote entry system of Kulha does not perform any particular function.

Thus, even though the Examiner alleges that Drori operates prescribed functions upon the reception of a remote control signal, Applicant submits that there is no teaching or suggestion in the combination of Kulha and Drori to perform a prescribed function when one of the doors is

opened after the doors are unlocked by the unlocking controller with a capture of the emergency signal, and then the closing of the opened door is detected by the closing detector, as recited in claim 13.

On page 9 of the Office Action, the Examiner appears to assert that the features recited in claim 13 are the same as those recited in the combination of claims 1 and 12. Applicants respectfully disagree. In particular, Applicant notes that while claim 12 recites that an actuation controller actuates a prescribed function when a remote control signal or emergency signal is received, claim 13 recites that a prescribed function is actuated when one of the doors is opened and the closing of the opened door is detected.

Based on the foregoing, Applicants respectfully submit that the combination of Kulha and Drori fails to teach or suggest all of the features of claim 13. Accordingly, Applicant submits that claim 13 is patentable over the cited prior art, and respectfully requests that the rejection be reconsidered and withdrawn. Claim 14 depends from claim 12, and claim 15 depends from claim 13. Accordingly, Applicant submits that claims 14 and 15 are patentable at least by virtue of their dependency.

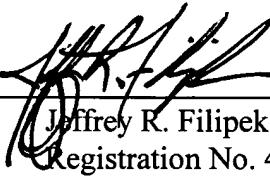
IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may best be resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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